

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 091674,237c
Source: FEW16
Date Processed by STIC: 5-25-05

ENTERED



IFW16

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,237C

DATE: 05/25/2005

TIME: 13:53:57

Input Set : A:\3477.89.ST25.txt
 Output Set: N:\CRF4\05252005\I674237C.raw

3 <110> APPLICANT: Egan, Sean E.
 4 Wang, Wei
 5 Sengar, Ameet
 7 <120> TITLE OF INVENTION: ESE GENES AND PROTEINS
 9 <130> FILE REFERENCE: 3477-89
 11 <140> CURRENT APPLICATION NUMBER: US 09/674,237C
 12 <141> CURRENT FILING DATE: 2001-07-24
 14 <150> PRIOR APPLICATION NUMBER: PCT/CA99/00375
 15 <151> PRIOR FILING DATE: 1999-04-27
 17 <150> PRIOR APPLICATION NUMBER: US 60/118,739
 18 <151> PRIOR FILING DATE: 1999-02-05
 20 <150> PRIOR APPLICATION NUMBER: CA 2230201
 21 <151> PRIOR FILING DATE: 1998-04-27
 23 <160> NUMBER OF SEQ ID NOS: 37
 25 <170> SOFTWARE: PatentIn version 3.3
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 5084
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Mus musculus
 32 <400> SEQUENCE: 1
 33 cggcacgagg aggagtggag cggcgccggg gggcgccag cttgggttgcg ccgttagtacg 60
 35 gcccgtcgca agggagcatc ccggcgccggc tccgggacgg ccggggaggca ggcaggcg 120
 37 cggcgccgggaa tgggtgtgcgc ggctgcggac tcggcggtcc tcgcgcggcg tgcgggctgc 180
 39 actgatttgt gtgaggggcg gccgcgcgca cccgcgggaa gatgaggcgt cgatcagcaa 240
 41 ggtgaacgta atagaaccat ggctcagttt cccacaccc ttccgggttag cctggatgtc 300
 43 tggccataa ctgtggagga aaggggcaag catgaccagc agttccttag cctgaagccg 360
 45 atagcgggat ttattactgg ttagcaagcg aggaactttt ttttccaatc tgggttaccc 420
 47 cagcctgtct tagcacaat atggcgcta gcggacatga ataacgatgg aaggatggat 480
 49 caagtggaat ttccatagc catgaagctt atcaaactga agctacaagg atatcagctc 540
 51 ccctccacac ttccccctgt catgaaacag caaccagtgg ctatccatc tgcaccagca 600
 53 tttggatata gagggattgc tagcatgcca ccactcacag ctgttgcctc tggccatg 660
 55 ggctccattc cagttgtgg aatgtctcca cccttagtat cttctgtccc tccagcagca 720
 57 gtgcctcccc tggctaacgg ggctccccc gtcatacagc ctctgcctgc gtttgcgcatt 780
 59 cctgcagcca catggccaaa gagttcttc ttcaagcagat ctggtccagg gtcacaattt 840
 61 aacactaagt tacagaaggc acaatcattc gatgtcgcca ggcggccccc agcagcagaa 900
 63 tgggtgtgc ctcagtcattc aaggctgaaa tacaggcgt tattcaacag ccacgacaaa 960
 65 actatgatgt gacacttaac aggtccccag gcaagaacta ttctcatgca atcaagttt 1020
 67 ccccaggctc agctggcttca aatatggaaat ctttctgaca ttgatcaaga tggaaaactc 1080
 69 actgcagaag aatttatcct agtcatgcac ctaattgtat ttgccatgtc tggcagcc 1140
 71 ctggccccc tccctgcctcc agaatacattc cttcccttc tcaagaagagt tcgcctccggc 1200
 73 agtggatgt ccgtcataag ctcttcttct gtggatcaga ggctgcctga ggagccgtcg 1260
 75 tcagaggatg agcagcagcc agagaagaaa ctgcctgtga catttgaaga taagaagcgg 1320
 77 gagaacttcg agcgaggcag tgtggagctg gagaagcgcc gccaagcgct cttggagcag 1380

(pg. 6)

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,237C

DATE: 05/25/2005

TIME: 13:53:57

Input Set : A:\3477.89.ST25.txt

Output Set: N:\CRF4\05252005\I674237C.raw

79	cagcgcaaag	agcaggagcg	gttggctca	ctggagcg	ccgagcagga	gaggaaagag	1440
81	cgggagcgcc	aggagcagga	ggccaagcg	cagctggagc	tggagaagca	gctggagaag	1500
83	cagcgggagc	tggagcggca	gcgagaggag	gagaggagga	aggagatcga	gaggcgcgag	1560
85	gccgcaaaac	gggaactgga	aaggcagcg	caacttgaat	gggaacggaa	ccggagacag	1620
87	gaactcctga	atcagaggaa	caaggagcg	gagggcaccg	tggcctgaa	ggcaaggagg	1680
89	aagactctgg	agtttgagtt	agaagctctg	aatgacaaaa	agcatcagct	agaaggaaaa	1740
91	cttcaggata	tcaggtgtcg	actggcaacc	cagaggcaag	aaatttgagag	cacgaacaag	1800
93	tcttagagagc	taagaattgc	tgaaatcacc	cacttacagc	agcagttgca	ggaatctcg	1860
95	caaatgcttgc	gaagacttat	tccagagaaa	cagatactca	gtgaccagg	aaaacaagtc	1920
97	cagcagaaca	gtttgcata	agactcgctt	cttaccctca	aaagagcctt	ggaagcaaaag	1980
99	gagctggccc	ggcagcagct	ccgggagcg	ctggacgagg	tggagagaga	gaccaggtca	2040
101	aagctgcagg	agattgtatgt	tttcaacaac	cagctgaagg	aacttgagaga	gatacatagc	2100
103	aaacagcaac	tccagaagca	gaggtccctg	gaggcagcg	gactgaagca	gaaagagcag	2160
105	gagaggaaga	gcctggagtt	agagaagcaa	aaggaaagacg	ctcagagacg	agttcaggaa	2220
107	agggacaagc	aatggctgga	gcatgtcgag	caggaggagc	agccacgccc	ccgaaacccc	2280
109	cacgaggagg	acagactgaa	gagggaaagac	agtgtcgag	agaaggaggc	ggaagagaga	2340
111	gccaagccgg	aaatgcaaga	caagcagagt	cggctttcc	atccgcatca	ggagccagct	2400
113	aagctggcca	cccaggcacc	ctggcttacc	acagagaaaag	gcccgcctac	catttctgca	2460
115	caggagatgt	taaaaatgtt	atattaccga	gcgtgttacc	ccttgaatc	cagaagtac	2520
117	gatgagatca	ccatccagcc	aggagatata	gtcatggtgg	atgaaagcca	gactggagag	2580
119	ccaggatggc	ttggaggaga	gctgaaaggg	aagacgggat	ggttccctgc	aaactatgca	2640
121	aaaaagattc	cagaaaatga	gttcccact	ccagccaaac	cagtgaccga	tctgacatct	2700
123	gcccctgccc	ccaaactggc	tctgcgtgag	accctctgctc	cttgcctagt	gacctcttct	2760
125	gagccctcca	caaccccaa	caactggca	gacttcagtt	ccacgtggcc	cagcagctca	2820
127	aacgagaagc	cagaaacgga	caactggat	acgtggcg	ctcagccttc	tctgaccgt	2880
129	cctagtgtcg	gccagttacg	gcagagatca	gccttaccc	cagccacagc	cactggctcc	2940
131	tcccatctc	ccgtcctggg	ccagggtgaa	aagggtggaa	ggctacaagc	gcaagccctg	3000
133	tatccctgga	gagccaaaaaa	agacaaccac	ttaaattttt	acaaaagtga	cgtcatcacc	3060
135	gttctggAAC	agcaagacat	gtgggtggtt	ggagaagttc	aaggtcagaa	gggttgggtc	3120
137	cccaagtctt	acgtgaaact	catttcagg	cccgtaagga	aatccacaag	catcgatact	3180
139	ggccctactg	aaagtccctgc	tagtctaaag	agagtggctt	ccccggccgc	caagccagcc	3240
141	attcccgag	aaggtttat	tgccatgtac	acatacgaga	gttctgagca	aggagattta	3300
143	acctttcagc	aagggtatgt	gattgtgggt	accaagaaaag	atggtaactg	gtggacggga	3360
145	acgggtggcg	acaagtcccg	agtcttccct	tctaactatg	tgaggcttaa	agattcagag	3420
147	ggctctggaa	ctgctggaa	aacagggagt	ttaggaaaaaa	aacctgaaat	tgcccaggtt	3480
149	attgcttcct	acgctgtac	tggtcccgaa	caactcacc	tggccttgg	gcagctgatt	3540
151	ctgatccgga	aaaagaaccc	aggtggatgg	tgggaaggag	aactgcaagc	tcgagggaaa	3600
153	aagcgccaga	taggtgggtt	tccagcaa	tatgtcaac	ttctaa	cggaacaagc	3660
155	aaaatcaccc	caactgagct	acccaagacc	gcagtgcagc	cagcagtg	ccaggtgatc	3720
157	gggatgtacg	attacaccgc	ccagaacgat	gacgaactag	ccttcagca	agggcagatc	3780
159	atcaacgtcc	tcaacaagga	ggaccggac	tggtgaaag	gagaagtcag	tggcaagtt	3840
161	gggcttcc	catccaatta	tgtaaagctg	accacagaca	tggaccc	ccagcaatga	3900
163	atcatatgtt	gtccatcccc	ccctcaggct	tgaaagtctt	caaagagacc	cactatccca	3960
165	tatcactgccc	cagagggatg	atgggagatg	cagccttgc	catgtgactt	gcagcatgat	4020
167	cacctactgc	cttctgagta	gaagaactca	ctgcagagca	gtttacctca	tttgacctt	4080
169	gttgcattgt	atcgaaaatgt	ctgagtcact	gcgtgcagag	gcagaagcaa	attgcagaac	4140
171	tgcacagggt	ggtgggtcct	tttggggctt	tccttagtac	tcaactgac	cggccccgccc	4200
173	ttcacacggg	cgcttcaat	agtttaaga	ttattttaa	atgtgtat	ttacaaaaac	4260
175	ataaaaaatct	caatcaatta	tttcttgc	tatgggtt	ttacaaaaac	acccactatc	4320

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,237C

DATE: 05/25/2005

TIME: 13:53:57

Input Set : A:\3477.89.ST25.txt

Output Set: N:\CRF4\05252005\I674237C.raw

177 aaggagtgc tgcgtcgaa cgattaaaat gctgtccgg gcgtaccgta aactgagac 4380
 179 ttgctgtacc tttgcgttt gtccagtgtt cccaaaccaca ttgtgttagtt tggggctgtt 4440
 181 ccctgcgtt gagcacagag gagatgggt tacctgttt gaaaatgtgt atgttagactg 4500
 183 agcctgacta tggaaagggtt tatgcttgc tgcgtaccatc acgtgtacccgtgcgcgtatg 4560
 185 taccatctgt accgaagaag tagctctcc tccatggcta aaccacccac cgtgtacagt 4620
 187 gctctcatct actgcattca ttttactttc cacagtgacc ttgttagccac ctgaggaaagc 4680
 189 acccatgttt ccgttggtc tcaagatgtac ctatgtgc ccgtgtttt ttttatttt 4740
 191 tcaatctggc atgtcttcac accataaaact agtaagacgc caactgc ccc ggcggttacg 4800
 193 atcatcagta cccaccgtct tagtctctgt tacgtgaagt ttattccagt tgcttttat 4860
 195 ggaatatctt gaacaagtaa tcttcttgac aagaagaat gtatagaagt ctccctgcaa 4920
 197 ttaatttccc agtgttaca tttttaact agactgtggg ggttgc taca gattaatatg 4980
 199 aaatggcgct cctggccgt gtgtgtgtt, acttgtgtc tagctgaagc cgtgtgtcct 5040
 201 tagatattag ttgaaagtgc ggaagagaat tcgatataa gctt 5084
 204 <210> SEQ ID NO: 2
 205 <211> LENGTH: 3642
 206 <212> TYPE: DNA
 207 <213> ORGANISM: Mus musculus
 210 <220> FEATURE:
 211 <221> NAME/KEY: CDS
 212 <222> LOCATION: (1)..(3642)
 213 <223> OTHER INFORMATION: Mouse Esel
 215 <400> SEQUENCE: 2

216 atg	gct	cag	ttt	ccc	aca	cct	ttc	ggt	ggt	agc	ctg	gat	gtc	tgg	gcc	48
217 Met	Ala	Gln	Phe	Pro	Thr	Pro	Phe	Gly	Gly	Ser	Leu	Asp	Val	Trp	Ala	
218 1										10					15	
220 ata	act	gtg	gag	gaa	agg	gcc	aag	cat	gac	cag	cag	ttc	ctt	agc	ctg	96
221 Ile	Thr	Val	Glu	Glu	Arg	Ala	Lys	His	Asp	Gln	Gln	Phe	Leu	Ser	Leu	
222												20	25		30	
224 aag	ccg	ata	gcg	gga	ttt	att	act	ggt	gat	caa	gcg	agg	aac	ttt	ttt	144
225 Lys	Pro	Ile	Ala	Gly	Phe	Ile	Thr	Gly	Asp	Gln	Ala	Arg	Asn	Phe	Phe	
226												35	40		45	
228 ttc	caa	tct	ggg	tta	cct	cag	cct	gtc	tta	gca	caa	ata	tgg	gcg	cta	192
229 Phe	Gln	Ser	Gly	Leu	Pro	Gln	Pro	Val	Leu	Ala	Gln	Ile	Trp	Ala	Leu	
230												50	55		60	
232 gcg	gac	atg	aat	aac	gat	gga	agg	atg	gat	caa	gtg	gaa	ttt	tcc	ata	240
233 Ala	Asp	Met	Asn	Asn	Asp	Gly	Arg	Met	Asp	Gln	Val	Glu	Phe	Ser	Ile	
234												65	70		75	80
236 gcc	atg	aag	ctt	atc	aaa	ctg	aag	cta	caa	gga	tat	cag	ctc	ccc	tcc	288
237 Ala	Met	Lys	Leu	Ile	Lys	Leu	Lys	Leu	Gln	Gly	Tyr	Gln	Leu	Pro	Ser	
238												85	90		95	
240 aca	ctt	ccc	cct	gtc	atg	aaa	cag	caa	cca	gtg	gct	att	tcc	agt	gca	336
241 Thr	Leu	Pro	Pro	Val	Met	Lys	Gln	Gln	Pro	Val	Ala	Ile	Ser	Ser	Ala	
242												100	105		110	
244 cca	gca	ttt	ggt	ata	gga	ggg	att	gct	agc	atg	cca	cca	ctc	aca	gct	384
245 Pro	Ala	Phe	Gly	Ile	Gly	Gly	Ile	Ala	Ser	Met	Pro	Pro	Leu	Thr	Ala	
246												115	120		125	
248 gtt	gct	cct	gtg	cca	atg	ggc	tcc	att	cca	gtt	gtt	gga	atg	tct	cca	432
249 Val	Ala	Pro	Val	Pro	Met	Gly	Ser	Ile	Pro	Val	Val	Gly	Met	Ser	Pro	
250												130	135		140	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,237C

DATE: 05/25/2005
TIME: 13:53:57

Input Set : A:\3477.89.ST25.txt
Output Set: N:\CRF4\05252005\I674237C.raw

252	ccc tta gta tct tct gtc cct cca gca gca gtg cct ccc ctg gct aac	480
253	Pro Leu Val Ser Ser Val Pro Pro Ala Ala Val Pro Pro Leu Ala Asn	
254	145 150 155 160	
256	ggg gct cct ccc gtc ata cag cct ctg cct gcg ttt gcg cat cct gca	528
257	Gly Ala Pro Pro Val Ile Gln Pro Leu Pro Ala Phe Ala His Pro Ala	
258	165 170 175	
260	gcc aca tgg cca aag agt tct tcc ttc agc aga tct ggt cca ggg tca	576
261	Ala Thr Trp Pro Lys Ser Ser Phe Ser Arg Ser Gly Pro Gly Ser	
262	180 185 190	
264	caa tta aac act aag tta cag aag gca caa tca ttc gat gtc gcc agc	624
265	Gln Leu Asn Thr Lys Leu Gln Lys Ala Gln Ser Phe Asp Val Ala Ser	
266	195 200 205	
268	gcc cct cca gca gca gaa tgg gct gtg cct cag tca tca agg ctg aaa	672
269	Ala Pro Pro Ala Ala Glu Trp Ala Val Pro Gln Ser Ser Arg Leu Lys	
270	210 215 220	
272	tac agg cag tta ttc aac agc cac gac aaa act atg agt gga cac tta	720
273	Tyr Arg Gln Leu Phe Asn Ser His Asp Lys Thr Met Ser Gly His Leu	
274	225 230 235 240	
276	aca ggt ccc cag gca aga act att ctc atg caa tca agt tta ccc cag	768
277	Thr Gly Pro Gln Ala Arg Thr Ile Leu Met Gln Ser Ser Leu Pro Gln	
278	245 250 255	
280	gct cag ctg gct tca ata tgg aat ctt tct gac att gat caa gat gga	816
281	Ala Gln Leu Ala Ser Ile Trp Asn Leu Ser Asp Ile Asp Gln Asp Gly	
282	260 265 270	
284	aaa ctc act gca gaa gaa ttt atc cta gct atg cac cta att gat gtt	864
285	Lys Leu Thr Ala Glu Glu Phe Ile Leu Ala Met His Leu Ile Asp Val	
286	275 280 285	
288	gcc atg tct ggt cag cca ctg ccg ccc gtc ctg cct cca gaa tac atc	912
289	Ala Met Ser Gly Gln Pro Leu Pro Val Leu Pro Pro Glu Tyr Ile	
290	290 295 300	
292	cct cct tcc ttc aga aga gtt cgc tcc ggc agt ggg atg tcc gtc ata	960
293	Pro Pro Ser Phe Arg Arg Val Arg Ser Gly Ser Gly Met Ser Val Ile	
294	305 310 315 320	
296	agc tct tct tct gtg gat cag agg ctg cct gag gag ccg tcg tca gag	1008
297	Ser Ser Ser Val Asp Gln Arg Leu Pro Glu Glu Pro Ser Ser Glu	
298	325 330 335	
300	gat gag cag cag cca gag aag aaa ctg cct gtg aca ttt gaa gat aag	1056
301	Asp Glu Gln Gln Pro Glu Lys Lys Leu Pro Val Thr Phe Glu Asp Lys	
302	340 345 350	
304	aag cgg gag aac ttc gag cga ggc agt gtg gag ctg gag aag cgc cgc	1104
305	Lys Arg Glu Asn Phe Glu Arg Gly Ser Val Glu Leu Glu Lys Arg Arg	
306	355 360 365	
308	caa gcg ctc ttg gag cag cag cgc aaa gag cag gag cgg ttg gct cag	1152
309	Gln Ala Leu Leu Glu Gln Gln Arg Lys Glu Gln Glu Arg Leu Ala Gln	
310	370 375 380	
312	ctg gag cgc gcc gag cag gag agg aaa gag cgg gag cgc cag gag cag	1200
313	Leu Glu Arg Ala Glu Gln Glu Arg Lys Glu Arg Glu Arg Gln Glu Gln	
314	385 390 395 400	
316	gag gcc aag cgg cag ctg gag aag cag ctg gag aag cag cgg	1248

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/674,237C

DATE: 05/25/2005

TIME: 13:53:57

Input Set : A:\3477.89.ST25.txt

Output Set: N:\CRF4\05252005\I674237C.raw

317	Glu	Ala	Lys	Arg	Gln	Leu	Glu	Leu	Glu	Lys	Gln	Leu	Glu	Lys	Gln	Arg
318						405				410					415	
320	gag	ctg	gag	cgg	cag	cga	gag	gag	gag	agg	agg	aag	gag	atc	gag	agg
321	Glu	Leu	Glu	Arg	Gln	Arg	Glu	Glu	Glu	Arg	Arg	Lys	Glu	Ile	Glu	Arg
322						420				425				430		
324	cgc	gag	gcc	gca	aaa	cgg	gaa	ctg	gaa	agg	cag	cga	caa	ctt	gaa	tgg
325	Arg	Glu	Ala	Ala	Lys	Arg	Glu	Leu	Glu	Arg	Gln	Arg	Gln	Leu	Glu	Trp
326						435			440				445			
328	gaa	cgg	aac	cgg	aga	cag	gaa	ctc	ctg	aat	cag	agg	aac	aag	gag	cag
329	Glu	Arg	Asn	Arg	Arg	Gln	Glu	Leu	Leu	Asn	Gln	Arg	Asn	Lys	Glu	Gln
330						450			455			460				
332	gag	ggc	acc	gtg	gtc	ctg	aag	gca	agg	agg	aag	act	ctg	gag	ttt	gag
333	Glu	Gly	Thr	Val	Val	Leu	Lys	Ala	Arg	Arg	Lys	Thr	Leu	Glu	Phe	Glu
334	465					470				475				480		
336	tta	gaa	gct	ctg	aat	gac	aaa	aag	cat	cag	cta	gaa	gga	aaa	ctt	cag
337	Leu	Glu	Ala	Leu	Asn	Asp	Lys	Lys	His	Gln	Leu	Glu	Gly	Lys	Leu	Gln
338						485			490			495				
340	gat	atc	agg	tgt	cga	ctg	gca	acc	cag	agg	caa	gaa	att	gag	agc	acg
341	Asp	Ile	Arg	Cys	Arg	Leu	Ala	Thr	Gln	Arg	Gln	Glu	Ile	Glu	Ser	Thr
342						500			505			510				
344	aac	aag	tct	aga	gag	cta	aga	att	gct	gaa	atc	acc	cac	tta	cag	cag
345	Asn	Lys	Ser	Arg	Glu	Leu	Arg	Ile	Ala	Glu	Ile	Thr	His	Leu	Gln	Gln
346						515			520			525				
348	cag	ttg	cag	gaa	tct	cag	caa	atg	ctt	gga	aga	ctt	att	cca	gag	aaa
349	Gln	Leu	Gln	Glu	Ser	Gln	Gln	Met	Leu	Gly	Arg	Leu	Ile	Pro	Glu	Lys
350						530			535			540				
352	cag	ata	ctc	agt	gac	cag	tta	aaa	caa	gtc	cag	cag	aac	agt	ttg	cat
353	Gln	Ile	Leu	Ser	Asp	Gln	Leu	Lys	Gln	Val	Gln	Gln	Asn	Ser	Leu	His
354	545					550			555			560				
356	aga	gac	tcg	ctt	acc	ctc	aaa	aga	gcc	ttg	gaa	gca	aag	gag	ctg	
357	Arg	Asp	Ser	Leu	Leu	Thr	Leu	Lys	Arg	Ala	Leu	Glu	Ala	Lys	Glu	Leu
358						565			570			575				
360	gcc	cg	cag	ctc	cg	gag	cag	ctg	gac	gag	gtg	gag	aga	gag	acc	
361	Ala	Arg	Gln	Gln	Leu	Arg	Glu	Gln	Leu	Asp	Glu	Val	Glu	Arg	Glu	Thr
362						580			585			590				
364	agg	tca	aag	ctg	cag	gag	att	gat	gtt	tcc	aac	aac	cag	ctg	aag	gaa
365	Arg	Ser	Lys	Leu	Gln	Glu	Ile	Asp	Val	Phe	Asn	Asn	Gln	Leu	Lys	Glu
366						595			600			605				
368	ctg	aga	gag	ata	cat	agc	aaa	cag	caa	ctc	cag	aag	cag	agg	tcc	ctg
369	Leu	Arg	Glu	Ile	His	Ser	Lys	Gln	Gln	Leu	Gln	Lys	Gln	Arg	Ser	Leu
370						610			615			620				
372	gag	gca	g	cga	ctg	aag	cag	aaa	gag	cag	gag	agg	aag	agc	ctg	gag
373	Glu	Ala	Ala	Arg	Leu	Lys	Gln	Lys	Glu	Gln	Glu	Arg	Lys	Ser	Leu	Glu
374	625					630			635			640				
376	tta	gag	aag	caa	aag	gaa	gac	gct	cag	aga	cga	gtt	cag	gaa	agg	gac
377	Leu	Glu	Lys	Gln	Lys	Glu	Asp	Ala	Gln	Arg	Arg	Val	Gln	Glu	Arg	Asp
378						645			650			655				
380	aag	caa	tgg	ctg	gag	cat	gtg	cag	cag	gag	gag	cag	cca	cgc	ccc	cg
381	Lys	Gln	Trp	Leu	Glu	His	Val	Gln	Gln	Glu	Gln	Pro	Arg	Pro	Arg	

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 05/25/2005
PATENT APPLICATION: US/09/674,237C TIME: 13:53:58

Input Set : A:\3477.89.ST25.txt
Output Set: N:\CRF4\05252005\I674237C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:18; N Pos. 102,103

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:28, 29, 30, 31, 32, 33, 36, 37

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/674,237C

DATE: 05/25/2005

TIME: 13:53:58

Input Set : A:\3477.89.ST25.txt

Output Set: N:\CRF4\05252005\I674237C.raw

L:2218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:60